

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,286	08/23/2001-	Jeffrey A. Hubbell		1184
7	590 12/27/2004		EXAM	INER
Henry D Coleman Coleman Sudol Sapone PC			TESKIN, FRED M	
714 Colorado Avenue			ART UNIT	PAPER NUMBER
Bridgeport, CT 06605-1601			1713	
		DATE MAILED: 12/27/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office A.4' O	09/938,286	HUBBELL ET AL.				
Office Action Summary	Examin r	Art Unit				
	Fred M Teskin	1713				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 29 O	<u>ctober 2003</u> .					
2a) This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
<ul> <li>4)  Claim(s) 1-12 is/are pending in the application.</li> <li>4a) Of the above claim(s) 4-12 is/are withdrawn</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-3 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or</li> </ul>	n from consideration.					
Application Papers						
9)⊠ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
_	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  1) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) ⊠ Notice of References Cited (PTO-892) 2) ☑ Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>102504</u> .		atent Application (PTO-152)				

Application/Control Number: 09/938,286

Art Unit: 1713

Applicants' election with traverse of the chemical species in which "the polyanionic polymer is a carbomer polymer (i.e., a polyacrylic acid based polymer) and the linking moiety is obtained by the reaction of an allyl ether of pentaerythritol or sucrose with said polyanionic polymer or with monomers which form said polyanionic polymer" in the reply filed on October 29, 2003, is acknowledged. The traversal is on the ground(s) that (i) the presentation of the originally filed claims would not place such a serious burden on the examiner as to require restriction and (ii) the prosecution of the originally filed claims should not be restricted to the elected species.

This is not found persuasive because, as to point (i), it merely states conclusions and does not in any way relate to the examiner's reason for requiring election – i.e., patentable distinctness of the various chemical species embraced by the claims – set out in accord with MPEP 803.02. Indeed, it is apparent from the supporting disclosure that the claims are generic to a plurality of diverse compositions comprising various species of polyanionic polymer segments and linking moieties. The disclosed species so differ chemically and/or structurally that a search of all the species covered by the claims would be unduly extensive and burdensome; hence, the election requirement is proper under MPEP 808.01(a). In fact, applicants have acknowledged that the claimed compositions (and methods) are "generally patentably distinct from each other". (Reply, page 2.)

As to point (ii), examiner notes the originally filed claims will be restricted to the elected species *only* in the event no generic claim is ultimately found allowable. Should

Application/Control Number: 09/938,286

Art Unit: 1713

a generic claim be found allowable, treatment of claims to additional species is subject to the provisions of MPEP 809.02(c)(B).

The requirement is still deemed proper and is therefore made FINAL.

Claims 4-12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicants timely traversed the restriction (election) requirement in the reply filed on October 29, 2003, and identified therein claims 1-3 as readable on the elected species.

The disclosure is objected to because of the following informalities:

- (i) at page 8, the abbreviation "kd" should be defined at its first occurrence in the specification;
- (ii) at page 25, line 27, the phrase "and are quenched at the , is that ..." is obviously incomplete; and
- (iii) at page 33, line 17, the status of the copending application identified solely by attorney docket number should be updated as appropriate.

Appropriate correction of the specification is required.

Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1713

The expressions "molecular weight" (claims 1 and 2) and "average molecular weight" (claim 3) are ambiguous absent further definition in the claims or the specification. First, use of the term "average" in describing only the narrowest molecular weight range (in claim 3) creates uncertainty as to whether the broader ranges in claims 1-2 also reflect average values. Assuming they do, it is still unclear from the antecedent disclosure how the "average" is to be calculated when determining the applicability of prior art. For instance, are the recited ranges intended to express molecular weight as a number-average value, or as a weight-average or viscosity-average? Or is some other art-recognized expression of average molecular weight intended? Because a ten-fold or larger variation can exist between molecular weights expressed as, e.g., weight-average and number-average, one skilled in the art would not be possessed of a reasonable degree of certainty as to the metes and bounds of the claims.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 09/938,286

Art Unit: 1713

Claims 1-3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 2923692 to Ackerman et al.

Ackerman et al exemplify compositions of crosslinked acrylic acid copolymer wherein the acrylic acid monomer forming the polymer is reacted with varying amounts of a polyallyl ether of pentaerythritol or sucrose, Example IV, Polymers C – E and J. The exemplified copolymers, which are characterized as "highly water sensitive" (col. 12, lines 43-44), are seen to correspond to the elected species of composition in view of the identity of polyanionic polymer segments (acrylic acid-based) and linking moiety.

While the patentees do not give molecular weight values for the acrylic acid polymer segments, examiner notes that it is acknowledged herein that, in certain embodiments, applicants' crosslinked polyanionic polymer is analogous to a crosslinked homopolymer or copolymer of anionic monomers, such as the polymers sold by the BFGoodrich Company, the assignee of Ackerman et al, under the tradename Carbopol, e.g., carboxypolymethylenes with the triallyl ether of pentaerythritol as crosslinker (at 0.1 % to 2.5 %, w/w, based on other monomers; see specification, page 30). Polymer J in Ackerman et al is obtained by using, as crosslinker, a polyallyl ether of pentaerythritol at 2.0 % (per col. 12, line 60), an amount well within applicants' disclosed range. In addition, the patentees indicate that polymer prepared by the procedure illustrated in Example IV has "colloidal *gel-like* properties" (see col. 7, lines 36-50 and *cf.*, col. 12, lines 46-48), which appear similar to the microgel-forming property of applicants' polymer (*cf.*, specification at page 2, line 30).

Art Unit: 1713

In view of the acknowledged similarity in composition and the correspondence in mutually disclosed properties, examiner has plausible basis for concluding that the molecular weight limitations of claim 1-3 not expressly disclosed by Ackerman et al will inhere to the polymers of the above-cited examples thereof. Since this situation involves a 102/103 rejection where the property or characteristic relied upon for patentability may be inherent in the prior art and since the Office obviously does not have facilities to make and test claimed and prior art products, the burden properly shifts to applicants to show that the property or characteristic recited in the claims represents an unobvious difference. *In re Best*, 195 USPQ 430 (CCPA 1977).

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should

Art Unit: 1713

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FRED TESKIN
PRIMARY EXAMINER

FMTeskin/12-10-04